ABSTRACT

The present invention provides a modular, flexible system for deploying multiple video perception technologies. The telepresence system of the present invention is capable of allowing an operator to control multiple mono and stereo video inputs in a hands-free manner. The raw data generated by the input devices is processed into a common zone structure that corresponds to the commands of the user, and the commands represented by the zone structure are transmitted to the appropriate device. This modularized approach permits input devices to be easily interfaced with various telepresence devices. Additionally, new input devices and telepresence devices are easily added to the system and are frequently interchangeable. The present invention also provides a modular configuration component that allows an operator to define a plurality of views each of which defines the telepresence devices to be controlled by a particular input device. The present invention provides a modular flexible system for providing telepresence for a wide range of applications. The modularization of the software components combined with the generalized zone concept allows the systems and methods of the present invention to be easily expanded to encompass new devices and new uses.